



Year 2005

Air Quality Division

ANNUAL AIR EMISSIONS INVENTORY QUESTIONNAIRE

For Facilities Permitted to Operate a Crematory

Instructions

The 2005 Annual Emissions Inventory Questionnaire includes 4 forms that are required to be completed and submitted to the Air Quality Division. Instructions for each form are included below. Upon completion, submit the forms along with the signature by the Responsible Official of the facility within 90 days of receipt of a letter from the Department.

FORM 1: Facility General Information

SECTION I thru III: Complete all fields as requested.

FORM 2: Equipment, Stack, & Process Data

Equipment List: List all equipment data including the dry cleaning unit and boiler, that is operated at the facility. Include the Authorization To Operate (ATO) number for all the permitted equipment. Indicate, if not available.

Stack Information: Provide details of each stack.

Process Data: Provide details on Cremation Processes.

FORM 3: Emissions Data

Input the process rate for each crematory unit and the operational hours for each stack.
These calculations include emissions of the cremation process and emissions of fuel usage.
Once data is inputted, the formulas are set to complete the calculations. Therefore, do not move or change any of the fields or columns. If moved the results will be wrong calculations.

FORM 4: Summary & Certification

A summarization of all the emissions by each pollutant will be listed within this form. All reports submitted to the Department should be certified true and accurate by the Responsible Official of the facility. This person is the owner or operator of the facility. **If there is a change of the Responsible Official of the facility, please notify the Department with an additional letter stating the change.**

The completed questionnaire should be submitted to the following address:

**Arizona Department of Environmental Quality
Attention: Darlene Celaya, Emission Inventory Team
Air Quality Division, Compliance Section 3415A-3
1110 West Washington Street
Phoenix, AZ 85007**

If you have any question or have difficulty completing this form, please contact Darlene Celaya at (602) 771-7662.

SECTION I: Plant Identification & Mailing Information

Customer Name: _____

Place Name: _____ Place ID: _____

Mailing Address: _____ City: _____ State: _____ Zip: _____

County: _____

Phone: _____ Fax: _____

Permit #/LTF # _____ General Permit: Yes ☐ No ☐

SECTION II: EI Contact

EI Contact Name: _____ Title: _____

Telephone: _____ Fax: _____

SECTION III: Confidential Request

Pursuant to Arizona Revised Statutes §49-432 and §49-201, do you claim the Emissions Inventory data submittal confidential. If yes include which portions of the inventory are confidential along with a brief explanation:

Yes ☐
No ☐

Equipment Details	Cremator #1	Cremator #2
Maximum Charging Rate (lb/hr)		
Actual Hours Operated (hours/year)		
Emission Control Device		
Equipment ID		
ATO#		

Stack Information	Stack #1	Stack #2
Height (feet)		
Diameter (feet)		
Velocity (feet/second)		
Exhaust Gas Temperature (F)		
Flow Rate (actual cubic feet per minute)		

Process Data	Cremator #1	Cremator #2
Number of cremations		
Average # of hours per cremation cycle		
Total number of hours operated for the year 2005		
Average weight of cremation (pounds/year)		
Process Rate = (# of cremations) x (average weight of cremation) / 2000 tons/year		

CREMATORY TOTAL EMISSIONS

(A) Cremator	(B) Process Rate tons/year	Pollutants	(C) Emission Factor (pounds/ ton)	Cremator 1 Emissions = [(B)x(C)]/2000 tons/year	Cremator 2 Emissions = [(B)x(C)]/2000 tons/year	Total Emissions = (Stack 1 + Stack 2) tons/year
1		PM	4.67			
		PM-10	3.04			
		PM-2.5	2.022			
2		NOx	5.93			
		SOx	2.66			
		CO	3.12			
		HCL	1.26			
		HF	0.0103			
		2,3,7,8-Tetrachlorodibenzo-p-dioxin	1.25E-09			
		Benzene	0.00501			
		Benzo(a)anthracene	0.000000208			
		Benzo(a)pyrene	0.00000057			
		Benzo(b)fluoranthene	0.000000734			
		Chrysene	0.000000983			
		Dibenz(a,h)anthracene	0.0000002			
		Dioxins/Furans (PCDD/PCDF)	0.00000092			
		Fluorene	0.00000655			
		Indeno(1,2,3-cd)pyrene	0.000000243			
		Naphthalene	0.00108			
		Toluene	0.0431			
		Xylenes	0.0258			
		Arsenic	0.00062			
		Beryllium	0.0000217			
		Cadmium	0.000175			
		Cobalt	0.0000882			
		Chromium	0.000583			
		Hexavalent Chromium	0.000213			
		Mercury	0.052			
		Nickel	0.000602			
		Lead	0.00104			
		Antimony	0.000564			
		Selenium	0.00069			
		Acetaldehyde	0.00162			
		Formaldehyde	0.000457			

FORM 4: SUMMARY & CERTIFICATION**YEAR 2005**

Total all the emissions for each pollutant and enter in the table below.

Pollutant	Tonnage (tons per year)
Particulate Matter (PM)	
Particulate Matter Less Than 2.5 Microns (PM2.5)	
Particulate Matter Less Than 10 Microns (PM10)	
Nitrogen Oxides (NOx)	
Sulfur Oxides (SOx)	
Carbon Monoxide (CO)	
Hazard Air Pollutants (HAPs)	

Certification of Truth & Accuracy

I certify that I have knowledge of the facts set forth in this questionnaire, and that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Arizona Department of Environmental Quality as public record.

Signature of Responsible Official: _____ Date: _____

Print Name: _____

Title: _____